

Rejected Issue

Patent # 4-9593
Issue Date 7-16-85

Proofed By:

Name	Date	SS#	Pgs.
jk	7/31	4344	6

CORRECTED BY:

Total Pages

Text	Claim
	6

Total Errors

Typos	Omissions	Additions
—	—	—

1 1 =PRINT ACCOUNT= 66227265 1 424/127 125 06201984 Use of gallium salts to treat disorders of calcium homeostasis 3
1 851490 0002 47983 (1) (2)(3) (4) (5) (6) (7)

Ø5091985 36 07161985 ZZX None 24 1 1 Friedman; Stanley J.
(8) (9)(10) (11)(12) (13) (14)(15)(16)(17) (18)(19)(20)(21)(22) (23)

Ø Ø 051753085

(24)(25)(26)(27)

8 0415 =PRINT ACCOUNT= PG,24 XCM What is claimed:

(1) PAGE#24 (2) CLAIM (3) (4) (5)

(6)

8 0420 =PRINT ACCOUNT= PG,25 XCM

1. Method effective against excessive loss of

(1) PAGE#25 (2) CLAIM (3) (4) (5) (6) (7) (8) (9)

calcium from bone in a human individual requiring such

(10) (11) (12) (13) (14)(15) (16) (17) (18)

treatment comprising administering to the individual an

(19) (20) (21) (22) (23) (24) (25)

effective amount of a pharmaceutically acceptable

(26) (27) (28) (29)(30) (31)

gallium compound.

(32) (33)

(34) /
8 Ø425 =PRINT ACCOUNT= /PG, 26 /+CM 2. Method of claim 1 wherein said excess loss
(1) PAGE#26 (2) CLAIM (3) (4) (5) (6) (7)(8) (9) (10) (11)
is due to hypercalcemia.
(12) (13) (14) (15)

(16) /
8 Ø43Ø =PRINT ACCOUNT= /CM 3. Method of claim 1 wherein said excess loss
(1) CLAIM (2) (3) (4) (5) (6)(7) (8) (9) (10)
is due to osteopenia or osteoporosis.
(11) (12) (13) (14) (15) (16)

(17) /
8 Ø435 =PRINT ACCOUNT= /CM 4. Method of claim 1 wherein said excess loss
(1) CLAIM (2) (3) (4) (5) (6)(7) (8) (9) (10)
is due to bone metastasis from malignant tumors.
(11) (12) (13) (14) (15) (16) (17) (18)

(19) /
8 Ø44Ø =PRINT ACCOUNT= /CM 5. Method of claim 1 wherein said excess loss
(1) CLAIM (2) (3) (4) (5) (6)(7) (8) (9) (10)
is due to hyperparathyroidism.
(11) (12) (13) (14)

(15) /
8 Ø445 =PRINT ACCOUNT= /CM 6. Method of claim 1 wherein said excess loss
(1) CLAIM (2) (3) (4) (5) (6)(7) (8) (9) (10)

is due to periodontal disease and said gallium compound

(11) (12) (13) (14) (15) (16) (17) (18) (19)

is administered intra-orally in a topical formulation

(20) (21) (22) (23) (24) (25) (26)

comprising a concentrated rinse, gel or other

(27) (28) (29) (30) (31) (32) (33)

pharmaceutically acceptable carrier.

(34) (35) (36)

(37)

8 0450 =PRINT ACCOUNT=

+CM 7. Method effective against excessive loss of

(1) CLAIM (2) (3) (4) (5) (6) (7) (8)

calcium from bone in animals requiring such treatment

(9) (10) (11) (12) (13) (14) (15) (16)

comprising the administering to said animals of an effective amount of

(17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27)

a pharmaceutically acceptable gallium compound.

(28) (29) (30) (31) (32)

(33)

8 0455 =PRINT ACCOUNT=

+CM 8. Method of inhibiting release of calcium from

(1) CLAIM (2) (3) (4) (5) (6) (7) (8) (9)

bone explants comprising contacting said explants with

(10) (11) (12) (13) (14) (15) (16)

a gallium compound.

(17) (18) (19)

(20)

8 Ø46Ø =PRINT ACCOUNT=

+PG,27

+CM 9. Method of claim 1 wherein said gallium

(1) PAGE#27 (2) CLAIM (3) (4) (5) (6) (7)(8) (9) (1Ø)

compound is administered intravenously, subcutaneously

(11) (12) (13) (14) (15)

or intramuscularly.

(16) (17)

(18)

8 Ø465 =PRINT ACCOUNT=

+CM

1Ø. Method of claim 3 wherein intravenous

(1) CLAIM (2) (3) (4) (5) (6)(7) (8)

injection comprises continuous infusion.

(9) (1Ø) (11) (12)

(13)

8 Ø47Ø =PRINT ACCOUNT=

+CM

11. Method of claim 9 wherein said injection

(1) CLAIM (2) (3) (4) (5) (6)(7) (8) (9)

comprises amount ranging from about +B 1Ø+14 4ØØ +L mg/sq m/day.

(1Ø) (11) (12) (13) (14) (15) BOLD (16) EN-DASH (17) (18) LIGHT (19) (2Ø)

(21)

8 Ø475 =PRINT ACCOUNT=

+CM

12. Method of claim 1 wherein the amount of said

(1) CLAIM (2) (3) (4) (5) (6)(7) (8) (9) (1Ø) (11)

administered gallium compound is sufficient to maintain

(12) (13) (14) (15) (16) (17) (18)

a steady state plasma gallium concentration ranging

(19)(2Ø) (21) (22) (23) (24) (25)

from about +B Ø.1+14 5.Ø +L ug/ml.

(26) (27) (28) BOLD (29) EN-DASH (3Ø) (31) LIGHT (32)

8 0480 =PRINT ACCOUNT=

(33)

+CM 13. Method of claim 12 wherein the amount of said
(1) CLAIM (2) (3) (4) (5) (6) (7) (8) (9) (10)
administered gallium compound is sufficient to maintain
(11) (12) (13) (14) (15) (16) (17)
a steady state plasma gallium concentration ranging
(18)(19) (20) (21) (22) (23) (24)
from about +B 0.9+14 2.0 +L ug/ml.
(25) (26) (27) BOLD (28) EN-DASH (29) (30) LIGHT (31)

8 0485 =PRINT ACCOUNT=

(32)

+CM 14. Method of claim 1 wherein said gallium
(1) CLAIM (2) (3) (4) (5) (6)(7) (8) (9)
compound is administered orally, sub-lingually, per
(10) (11) (12) (13) (14) (15)
rectum or transdermally.
(16) (17) (18)

8 0490 =PRINT ACCOUNT=

(19)

+PG, 28 +CM 15. Method of claim 14 wherein the amount of
(1) PAGE#28 (2) CLAIM (3) (4) (5) (6) (7) (8) (9) (10) (11)
administered gallium compound comprises amounts from
(12) (13) (14) (15) (16) (17)
about +B 0.5+14 20 +L grams/day.
(18) (19) BOLD (20) EN-DASH (21) (22) LIGHT (23)

(24)

8 Ø495 =PRINT ACCOUNT=

+CM 16. Method of claim 1 wherein said gallium

(1) CLAIM (2) (3) (4) (5) (6)(7) (8) (9)

compound is selected from the group consisting of

(1Ø) (11) (12) (13) (14) (15) (16) (17)

gallium nitrate, gallium citrate, gallium halide,

(18) (19) (2Ø) (21) (22) (23)

gallium chloride, gallium carbonate, gallium acetate,

(24) (25) (26) (27) (28) (29)

gallium tartrate, gallium oxalate, gallium oxide and

(3Ø) (31) (32) (33) (34) (35) (36)

hydrated gallium oxide.

(37) (38) (39)

(4Ø)

8 Ø5ØØ =PRINT ACCOUNT=

+CM 17. Method of claim 16 wherein said gallium

(1) CLAIM (2) (3) (4) (5) (6) (7) (8) (9)

compound is gallium nitrate.

(1Ø) (11) (12) (13)

(14)

8 Ø5Ø5 =PRINT ACCOUNT=

+CM 18. Method of claim 2 wherein said gallium

(1) CLAIM (2) (3) (4) (5) (6)(7) (8) (9)

compound is gallium nitrate.

(1Ø) (11) (12) (13)

(14)

8 Ø51Ø =PRINT ACCOUNT=

+CM 19. Method of claim 3 wherein said gallium

(1) CLAIM (2) (3) (4) (5) (6)(7) (8) (9)

compound is gallium nitrate.

(10) (11) (12) (13)

(14)

8 0515 =PRINT ACCOUNT=

+CM 20. Method of claim 4 wherein said gallium

(1) CLAIM (2) (3) (4) (5) (6)(7) (8) (9)

compound is gallium nitrate.

(10) (11) (12) (13)

(14)

8 0520 =PRINT ACCOUNT=

+CM 21. Method of claim 5 wherein said gallium

(1) CLAIM (2) (3) (4) (5) (6)(7) (8) (9)

compound is gallium nitrate.

(10) (11) (12) (13)

(14)

8 0525 =PRINT ACCOUNT=

+PG, 29 +CM 22. Method of claim 6 wherein said gallium

(1) PAGE#29 (2) CLAIM (3) (4) (5) (6) (7)(8) (9) (10)

compound is gallium nitrate.

(11) (12) (13) (14)

(15)

8 0530 =PRINT ACCOUNT=

+CM 23. Method effective against bone pain due to

(1) CLAIM (2) (3) (4) (5) (6) (7) (8) (9)

excessive loss of calcium from bone in a human

(10) (11) (12) (13) (14) (15) (16) (17)(18)

individual requiring such treatment comprising

(19) (20) (21) (22) (23)

administering to the individual an effective amount of

(24) (25) (26) (27) (28) (29) (30) (31)

pharmaceutically acceptable gallium compound.

(32) (33) (34) (35)

(36)

8 0535 =PRINT ACCOUNT=

CM 24. Method effective against bone fractures due

(1) CLAIM (2) (3) (4) (5) (6) (7) (8)

to excessive loss of calcium from bone in human a

(9) (10) (11) (12) (13) (14) (15) (16) (17) (18)

individual requiring such treatment comprising

(19) (20) (21) (22) (23)

administering to the individual an effective amount of

(24) (25) (26) (27) (28) (29) (30) (31)

a pharmaceutically acceptable gallium compound.

(32)(33) (34) (35) (36)

(37)